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SPECIAL DATA COLLECTION SYSTEM EVENT REPORT - CENTRAL  
SIBERIA, 29 SEPTEMBER 1975

K. J. Hill, et al

Teledyne Geotech

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Advanced Research Projects Agency

8 December 1975

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SDCS-ER-75-39

(PV)

**SPECIAL DATA COLLECTION SYSTEM EVENT REPORT  
Central Siberia, 29 September 1975**

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December 1975

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SDCS Event Report No. 39

Central Siberia, 29 September 1975

This event report contains seismic data from the Special Data Collection System (SDCS), and other sources for the above event. Published epicenter information from seismic observations is:

	"P" Arrival	Origin Time	Latitude	Longitude	$m_b$	$M_s$
NORSAR	11:06:27.0	11:00:00	70 N	090 E	4.7	N/A

Using SDCS stations, LASA and NORSAR, the epicenter location and magnitudes become

10:59:55.0	68.7N	090.9E	4.9	N/A
------------	-------	--------	-----	-----

All SDCS stations were operational during this period.

Short-period signals associated with this event were recorded at all SDCS stations, LASA and NORSAR.

No long-period signals were recorded at any of the SDCS stations. The vertical LP channel at WH2YK had an unknown operating gain and the data appeared to be invalid. All LP channels at RK-ON had unknown operating gains. The scaling factor for the C4LZ channel at LASA was questionable. ALPA and NORSAR long-period array data were not included due to program recovery problems.

Scaling factors on plots are millimicrons at 1 Hz (not corrected for instrument response) with the exception of LASA and NORSAR short-period plots. LASA SP scaling factors are millimicrons per inch. Scaling factors are not reported for NORSAR short-period.

2 .

ACCESSION NO.	DATE RECEIVED
200	REC'D BY
14 SEPTEMBER	<input type="checkbox"/>
1975	<input type="checkbox"/>
SEARCHED	
INDEXED	
FILED	
SERIALIZED	
FILE NUMBER	
100-1000000	

## STATION DESCRIPTION

SITE CODE	LOCATION	SITE COORDINATES DEG MN SEC'S			ELEVATION METERS	SHORT-PERIOD	LONG-PERIOD
		65	14	00.0 N			
ALPA	Alaska	147	44	36.0 W	626	None	31300
CPSO	McMinnville, Tennessee	35	35	41.4 N	574	6480 V 7515 H	SL210 V SL220 H
FN-WV	Franklin, West Virginia	085	34	13.5 W	910	KS36000	KS36000
LASA	Billings, Montana	38	32	58.0 N	744	HS10	7505A V
HN-ME	Houlton, Maine	46	41	19.0 N	213	18300	8700C H
NORSAR	Kjeller, Norway	067	59	09.0 W	379	HS10	SL210 V SL220 H
RK-ON	Red Lake, Ontario	60	49	25.4 N	366	18300	7505A V 8700C H
WH2YK	White Horse, Yukon	093	40	20.0 W	853	18300	SL210 V SL220 H

Note: The orientation of the radial instruments at FN-WV is assumed to be  $316^\circ \pm 5^\circ$  based on empirical data (event recordings). Rotation, where performed, is referenced to this azimuth and may be questionable.

HYPOCENTER DETERMINATION

INPUT FOR EVENT      29 SEP 75  
 11:00:00.0      70.002N      90.000E      0KM.

STA.	ARRIVAL	RESIDUALS		DIST.	AZ.
		CALC	PEST		
NAC	11 06 27.0	-0.1	-0.0	32.6	296.5
WH2YK	11 08 24.9	0.1	0.2	46.8	29.0
RK-CN	11 10 05.6	-1.4	-1.3	60.8	3.3
IAO	11 10 31.4	1.0	0.9	64.3	13.0
HN-ME	11 10 32.4	1.1	1.1	64.4	313.9
PN-WV	11 11 24.3	-0.1	-0.2	72.9	352.1
CFO	11 11 42.3	-0.5	-0.6	76.0	357.0

67 HERRIN TRAVEL TIME TABLES

ORIGIN	IAT.	LONG.	DEPTH (KM)	SDV	IT	STA
10:59:57.9	68.615N	90.865E	22. CALC	0.8	5	7
10:59:55.0	68.663N	90.865E	0. REST	0.8	4	7

CALC	PEST
3 . 3	3 . 3
0 . 0	0 . 0
1 0. 0 0	1 0. 0 0
0 0. 0 0	0 0. 0 0
0 . 0	0 . 0
0 : 0	0 : 0

CHI2 COVERAGE ELLIPSE: 95 PER CENT CONF.. LEVEL, SDV= 1.03  
 MAJOR    291.9KM. MINOR    30.6KM. AZ= 166 AREA= 28065 SQ.KM. PEST

## DATA SUMMARY

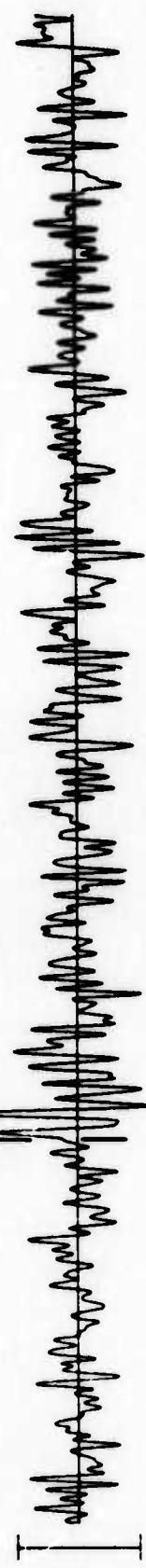
INPUT FOR EVENT      29 SEP 75  
 11:00:00.0    70.002N    90.000E    0KM.

<u>STA.</u>	<u>PHASE</u>	<u>ARRIVAL</u>			<u>MAGNITUDE</u>				
		<u>TIME</u>	<u>INST</u>	<u>PER</u>	<u>A/T</u>	<u>ME</u>	<u>MS</u>	<u>DIP</u>	<u>DIST</u>
NAO	EP	11 06 27.0	AB	0.7	15.	4.58		32.6	
WH2YK	EP	11 08 24.9	SPZ	0.6	14.	4.72		46.8	
RR-CN	EP	11 10 05.6	SPZ	0.7	8.	4.48		60.8	
LAO	EP	11 10 31.4	SAB	1.0	87.	5.64		64.3	
HN-ME	EP	11 10 32.4	SPZ	0.4	14.	4.85		64.4	
PN-WV	EP	11 11 24.3	SPZ	0.5	6.	4.38		72.9	
CFC	EP	11 11 42.3	SPZ	0.7	64.	5.41		76.0	
ORIGIN	LAT.	LONG.	DEPTH (KM)	MAG	SDV	STA			
10:59:57.9	68.615N	90.865E	22. CALC	4.81	0.47	7			
10:59:55.0	68.663N	90.865E	0. PEST	4.86	0.48	7			

WH2VK 29 SEP 75

11:08:24.9

SPZ  
14.85 MHz



SPR  
8.69 MHz



6.

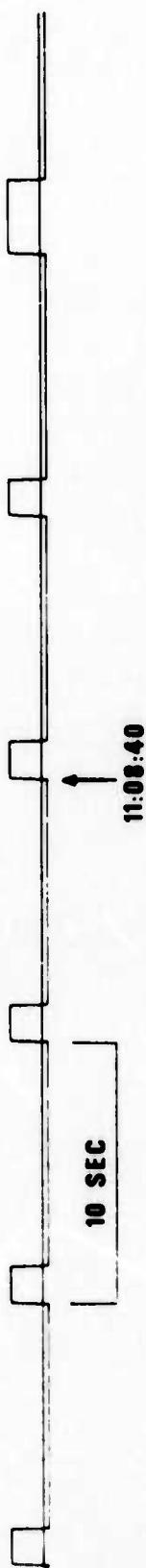
SPT  
11.11 MHz



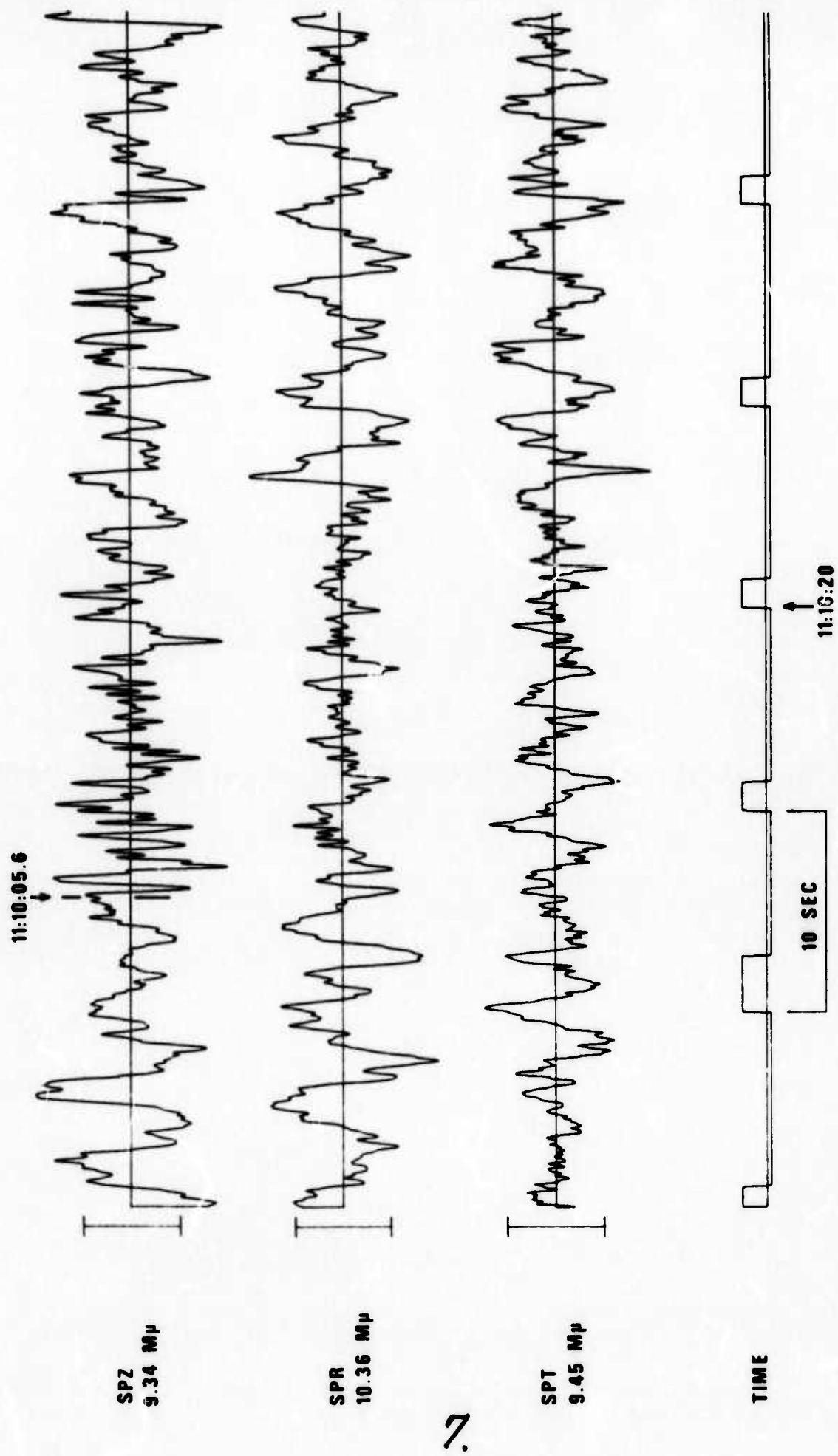
TIME

10 SEC

11:08:40



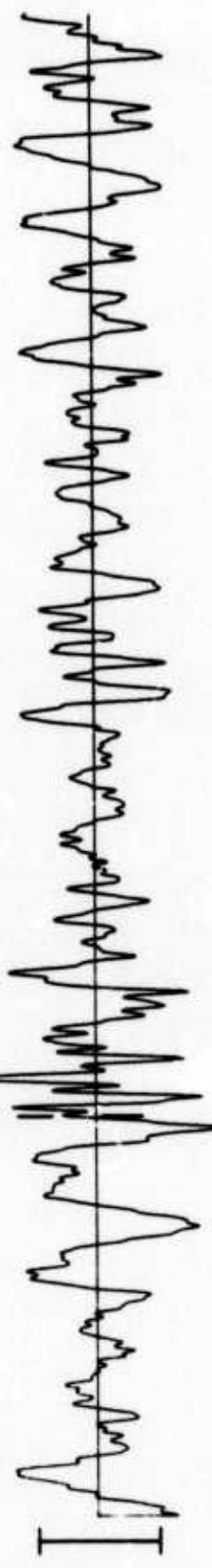
RK-ON 29 SEP 75



**HN-ME 29 SEP 75**

11:10:32.4

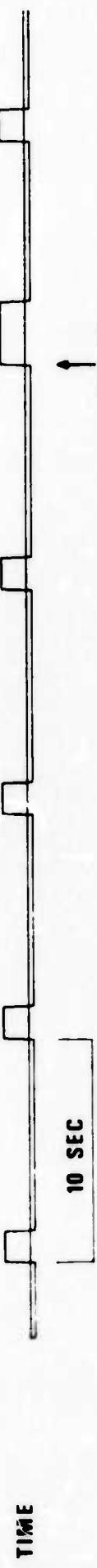
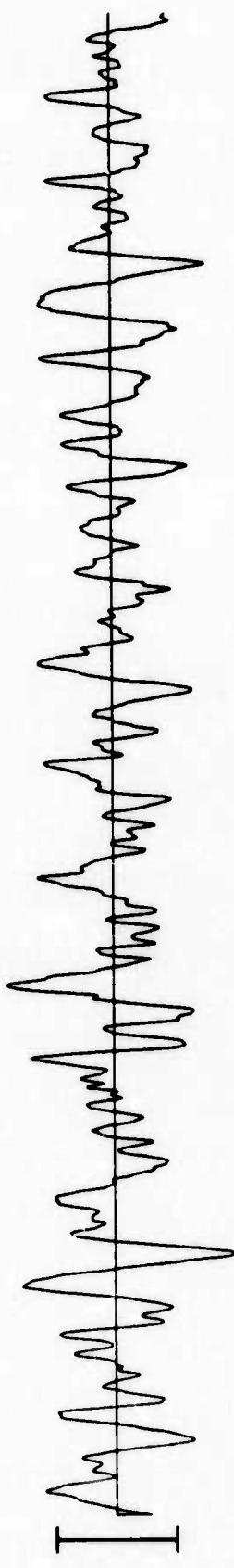
**SPZ  
19.86 M $\mu$**



**SPR  
15.99 M $\mu$**

**8.**

**SPT  
25.75 M $\mu$**



FN-WV 29 SEP 75

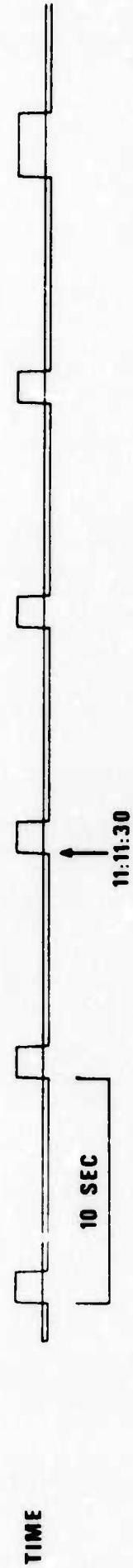
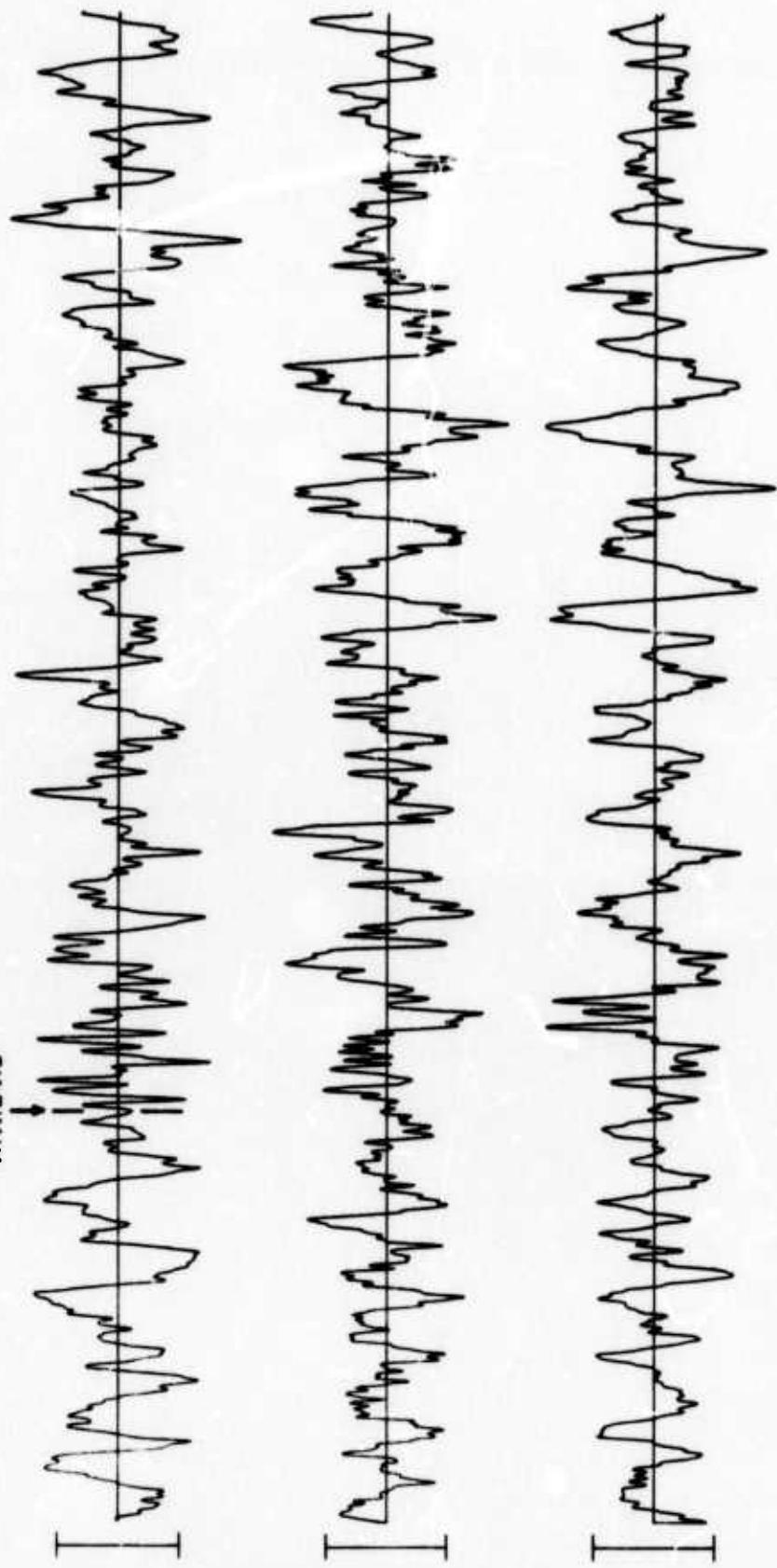
11:11:24.3

SPZ  
8.56 MHz

SPR  
6.37 MHz

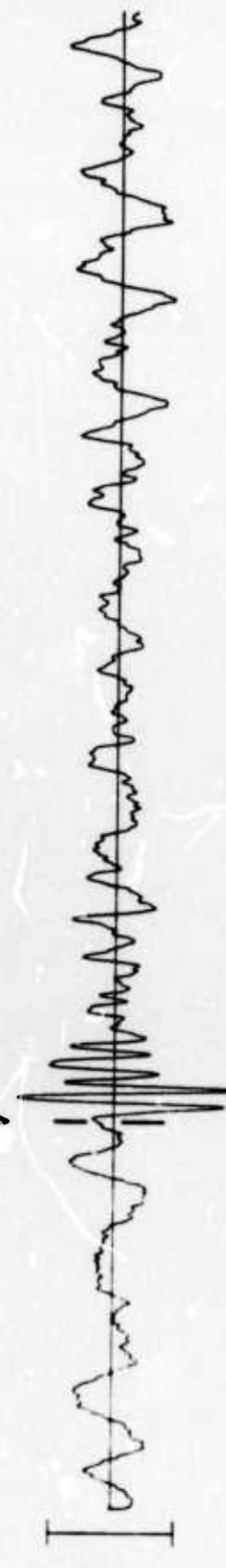
SPT  
11.05 MHz

9.

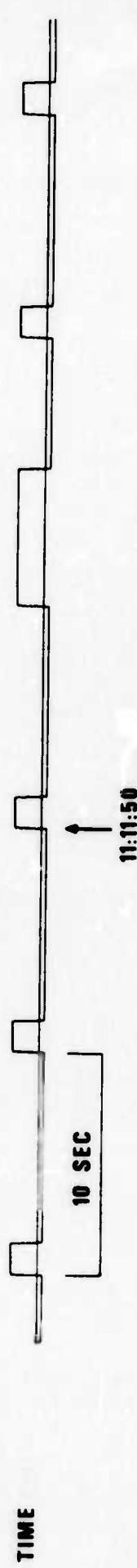


CPSO 29 SEP 75

11:11:42.3



10.

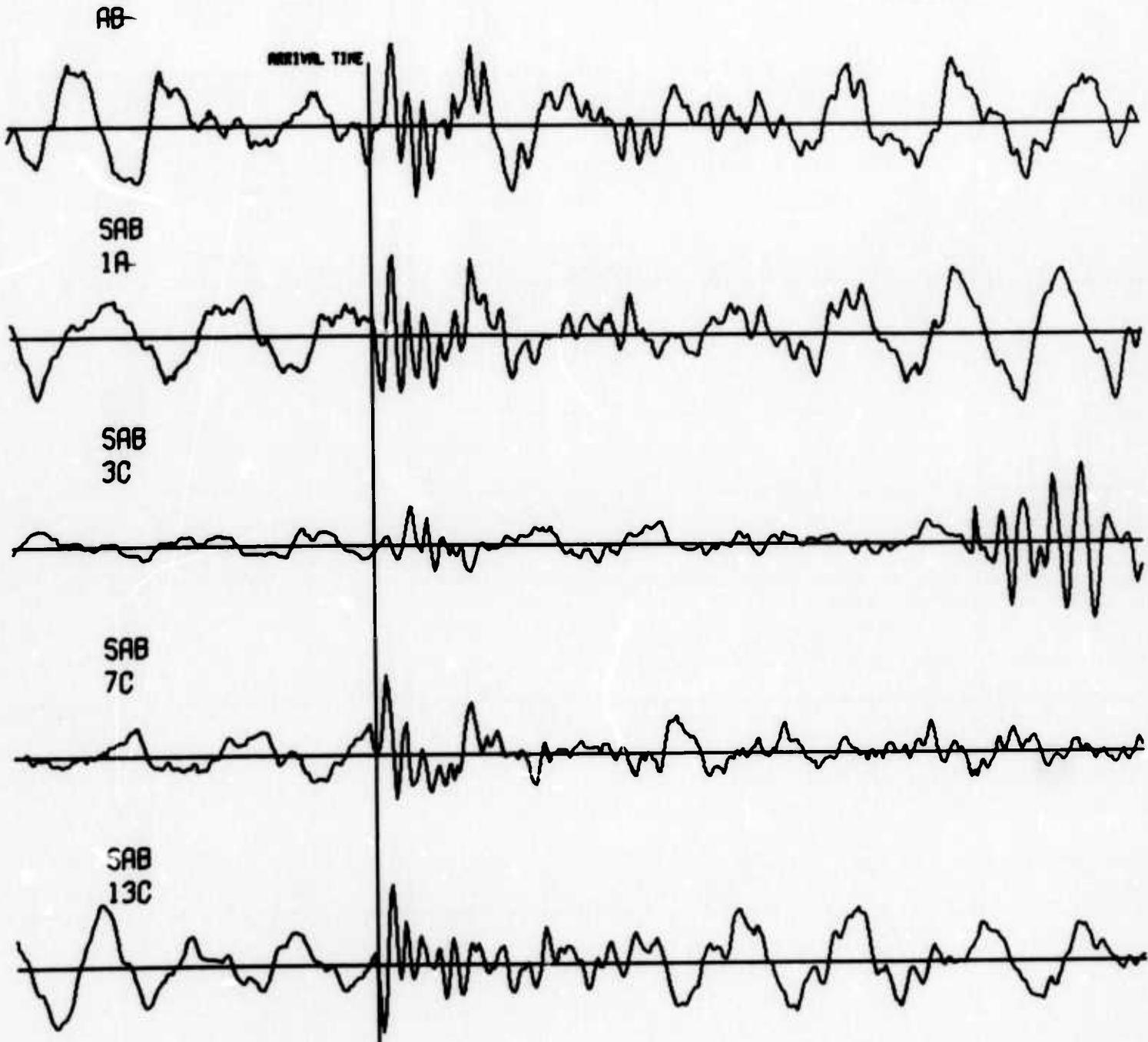
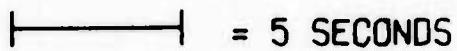


## NORSAR EVENT FILE

1975 SEP 29

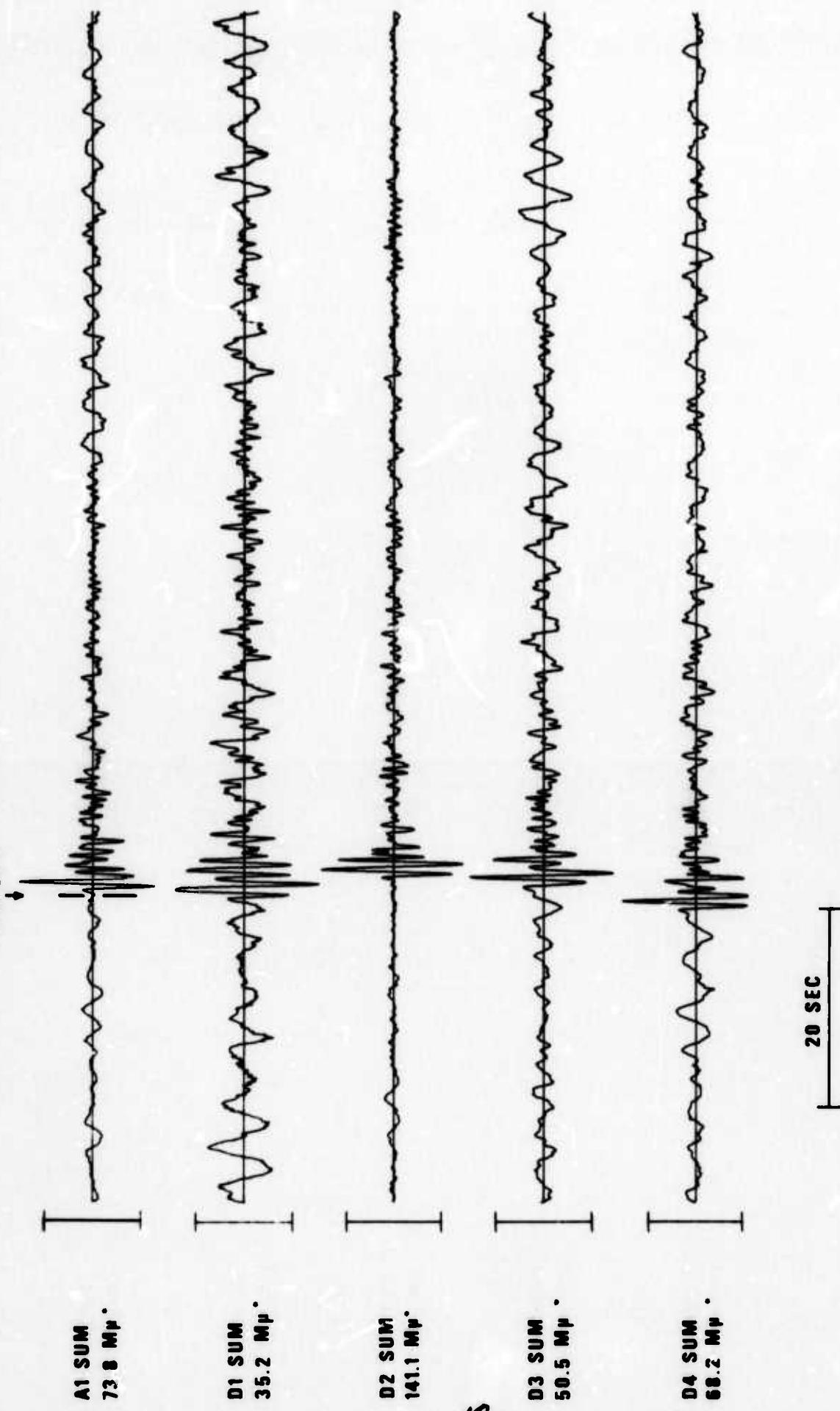
EPX NO. 66277 ARR. 11.6.27.2 69.7N 90.4E 4.0MB 0KM

DIST = 32.0 AZI = 40.4 AMP = 1.5 PER = 0.6



LASA INFINITE VELOCITY SUBARRAY SUMS 29 SEP 75

11:10:31.4



\*NUMBER OF INSTRUMENTS CONTRIBUTING IS UNCERTAIN

IMBALD CALIBRATION

11:25:00

TIME

2 MIN

TIME

170.32 MP  
169.36 MP

12.

UNKNOWN.



WHIZK 29 SEP 75

WAVES CALIBRATIONS

11:30:00

2 MIN

TIME



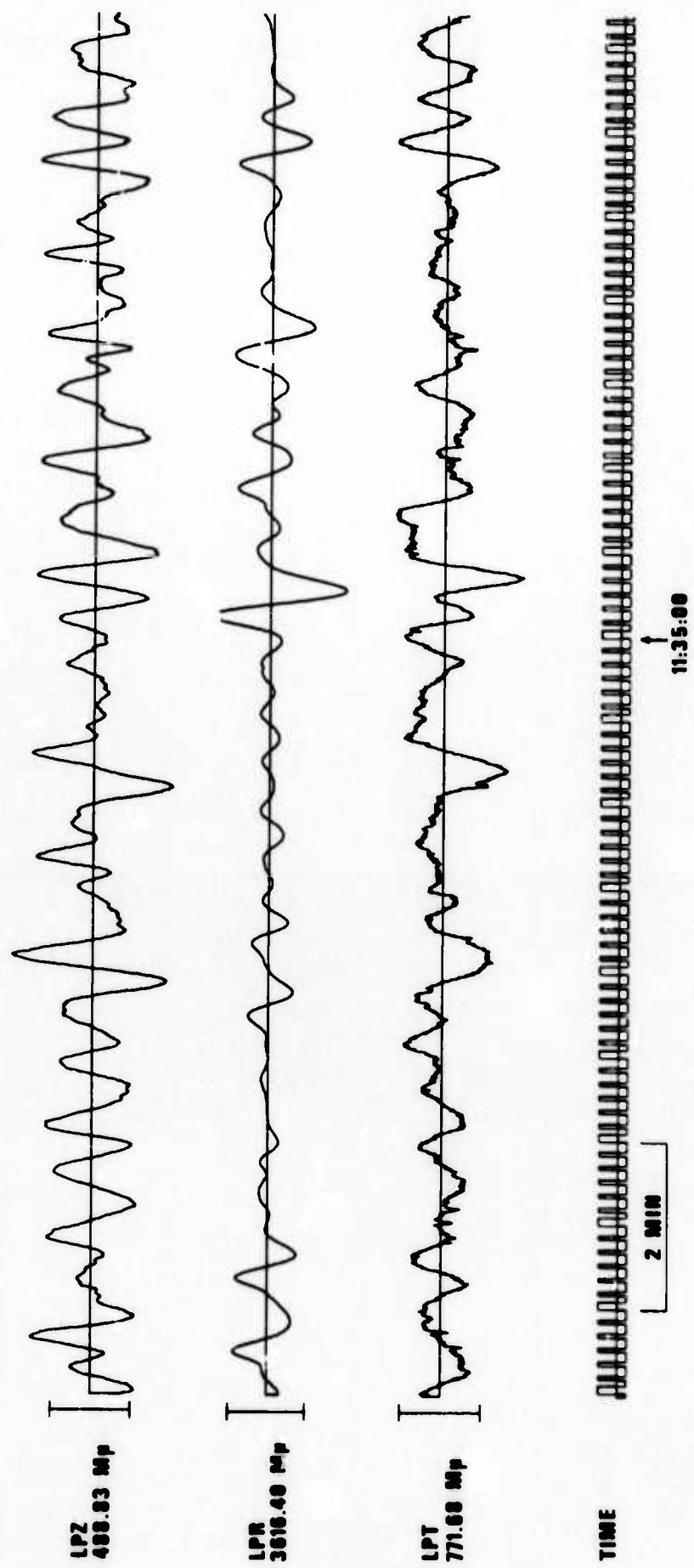
LPT UNKNOWN.

LPT UNKNOWN.

LPZ UNKNOWN.

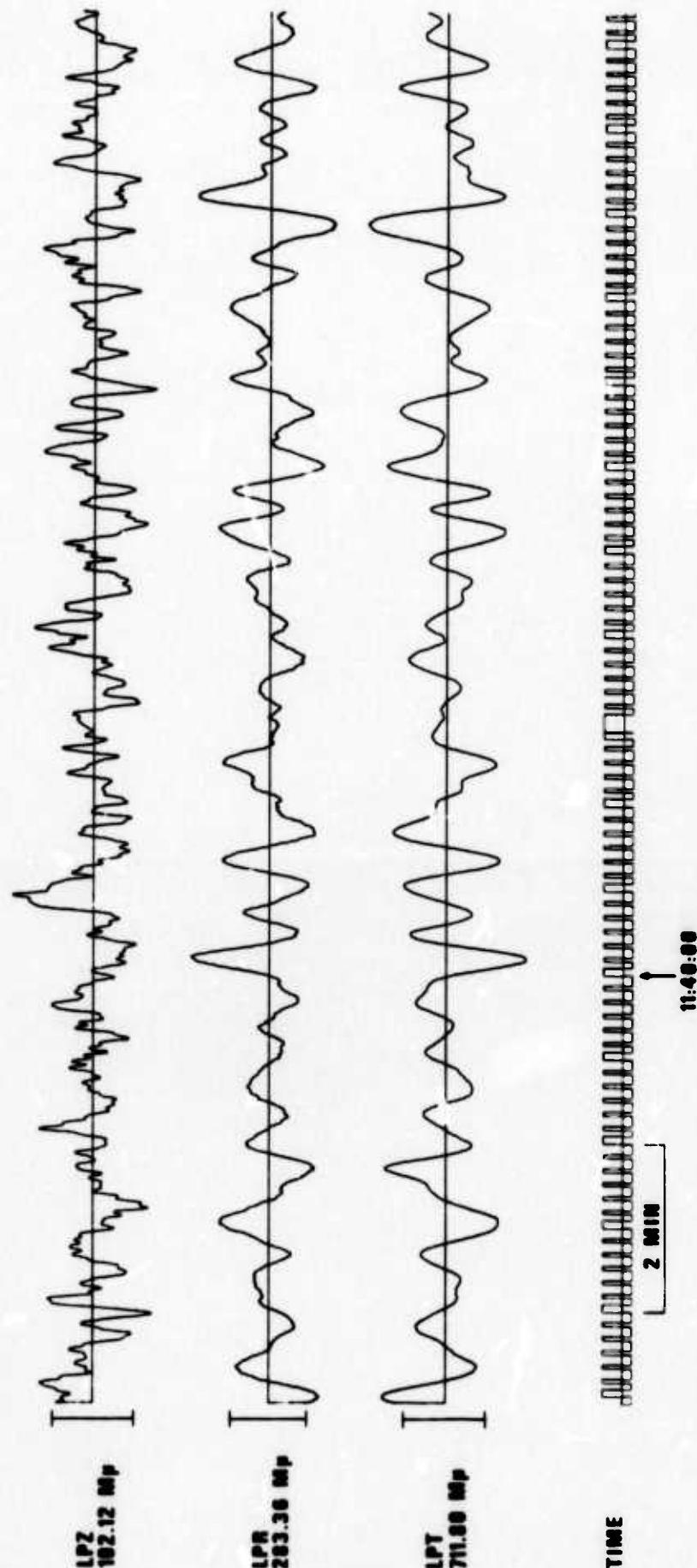
RI-04 29 SEP 75

HN-ME 29 SEP 75



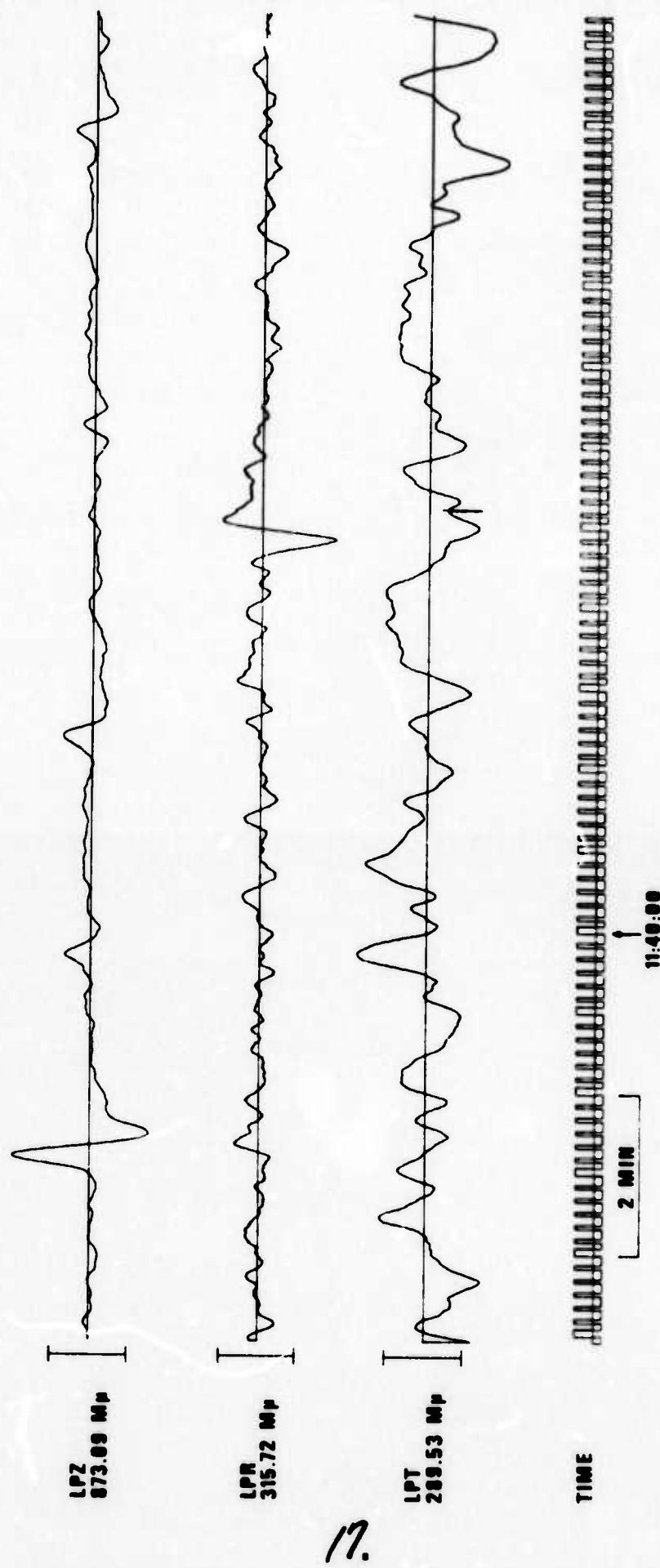
15.

FM-WV 29 SEP 75



16.

CPSO 29 SEP 75



LASA LONG-PERIOD C4 SUBARRAY BEAMS 29 SEP 75

